Inflation Growth

The Damped Spring Report

A synthesis of market drivers

Flow

Risk Premium

7/16/2019

Synthesis

Finally, the global central bankers will act later this month. Since January, when central bankers pivoted from hawkish to dovish around the globe the world has been waiting for dovish action instead of dovish words. Over the course of the next six months central banks will:

- Cut interest rates 3 notches at least
- Stop reducing the size of the balance sheet of the US Fed potentially sooner than September (though at this stage it doesn't matter much)
- Restart asset purchase programs

The central banks will not be effective in stimulating the global economy to deliver above trend growth rates nor supporting asset prices. We expect that the global economy will operate at below trend growth and low inflation for much of the next decade. We will save for another time the description of the multiple reasons for our view on the long-term outlook. However, we are confident that given the US and China are the only central banks with any tools to deal with the oncoming growth and inflation slowdown, and those tools are likely inadequate, the next six months should see markets dealing with further weakening growth and inflation expectations offset by some but again inadequate money printing support.

We will present in detail our reasoning for our overall synthesis on the economy, market pricing, volatility and flow later in the report. But first, we highlight our current view and positioning recommendations.

- Central bankers will ease monetary policy aggressively in the 2H2019 which will be inadequate to offset slowing growth but will be supportive to asset prices
- The US has the most room to ease which will weaken the US Dollar relative to gold and DM Currencies
- The ECB has no effective tools available in its current toolkit and will not be able to ease at all resulting in EUR relative strength and European Stocks relative weakness

- Inflation expectations have reset and will likely be an insignificant driver of asset prices
- By escalating the trade war Trump has seized a tool which can offset downside volatility in equity markets if the Fed is unable to stimulate. US financial institutions are in excellent shape and will be able and willing to print money if end clients want to leverage. Global investors are in extremely good shape regarding returns. For these reasons our expectations for forward realized volatility are benign
- Overall investor leverage is relatively low. Corporate leverage is relatively high which could produce some weakness in share repurchase flow

For these reasons we have the following positioning recommendations

Current Model Portfolio performance and recommendations

We recommend

- Remain Max long Gold despite trade becoming more crowded
- Remain long EURvsUSD
- Short Equities by adding Short call spreads in SPX and SX5e to the existing long put spreads on SX5e
- Long US bonds by adding Short put spread on TY and long call spread on TY

	Assumed Portfolio size	100,000,000					
	LTD P/L	5,317,005					
	Total Returm	5.32%					
	Today's Date	7/17/2019		Portfolio Created	l	4/15/2019	
Date	Position	Entry Price	Amount	Worst case loss	MTM	P/L	Open/Closed
5/14/2	2019 SX5E Sept 3200/3100 Put Spread	24	4167	1,000,000	5	(791,667)	Open
5/14/2	2019 GCZ9 Dec 1325/1275 Put Spread	24.7	-395	1,000,000	3.1	853,755	Open
6/19/2	2019 GCZ9 Dec 1400/1500 Call Spread	17	588	1,000,000	31	823,529	Open
5/14/2	2019 EURUSD Year end 1.15/1.2 Call spread	1.19	84,033,613	1,000,000	0.85	(285,714)	Open
7/17/2	2019 SPX Sept 3000/3050 Call Spreads	26.6	-427	1,000,000	26.6	-	Open
7/17/2	2019 SX5E Sept 3500/3600 CallSpread	43	-2381	1,000,000	43	-	Open
7/17/2	2019 TY Sept 127.5/126.5 Put Spread	0.4375	-1778	1,000,000	0.4375	-	Open
7/17/	2010 TV Sent 128/120 Call Shread	O 21875	1571	1 000 000	0 21875	_	Onen

Full Report

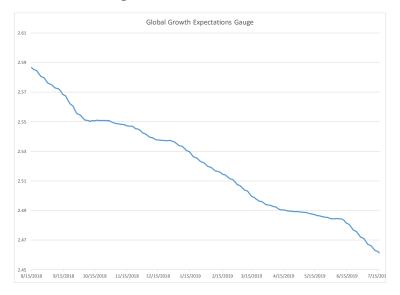
While we wait for the central bankers to pull out their available ammunition later this month it makes sense to step back and see where we are and where we have come from since the pivot in January. At Damped Spring Advisors we use a consistent framework for examining markets. To review:

- The principal drivers of financial assets are:
 - The changes in expectations of Growth and Inflation

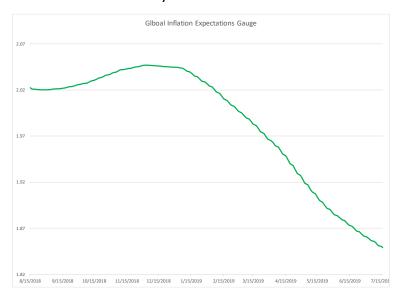
- The supply of money and credit available to relative to the demand for money and credit to purchase financial assets, invest in the real economy and consume
- Markets move to new prices based on these forces but the path and its
 volatility along the way to a new equilibrium depends on many factors which
 we examine using the Damped Spring Forward Volatility Model framework
- Existing positioning and portfolio risk impact the path to a new price and often results in persistent actionable divergence from subsequent fair value.

Economic Outlook

Global growth expectations have been downward trending for many months. Lately that trend has accelerated and gained momentum.



Inflation expectations have radically shifted and though the drop is slowing somewhat expectations seem unlikely to rise in the near term



As for money and credit supply given what is priced into to short rate markets across the globe it is unlikely that over the next 6 months that in aggregate the central bankers will be able to get ahead of the yield curve and offer rates low enough to stimulate borrowing. During the balance of July and most likely through September the US will continue to shrink its balance sheet. The burning of cash will make the rate cut less effective. However, by October, and possibly sooner if the Fed wants to surprise the market and get some bang from its meager ammunition, the end of QT will stop the cash burn. That is a mild positive. A combination of the actual cuts that occur and the end of QT will most likely mitigate any expansion of term premiums and limit the sell-off in financial assets as a class. But until the fed gets ahead of the curve and restarts QE financial assets will not rally much if at all and the real economy will see little stimulus.

If a miracle trade deal occurs in China, which we believe is unlikely without a significant drop in US stocks, the global central banks will act more slowly than we predict.

Regardless, of the trade deal outcome the paths of the central banks toward stimulating the global economy will not be effective. If as we expect the trade tensions will last at least through 2019 the predicted path will be inadequate. If the miracle trade deal occurs the impact will be temporary, and the central banks will not act as quickly.

Global Central Bank Circumstances							
СВ	Willing	Able	Enough to support economy in a downturn using existing tools				
Fed	Yes but not with "new" tools	Yes	Probably not	Maybe			
ECB	Yes with limitations	No without breaking limitations	No	No			
ВОЈ	Yes	No	No	Possibly if Equity buying is increased			
PBoC	Yes	Yes	Maybe	No, currency flight risk of easing may impact assets			
Globe	Yes	Yes	No	No			

The Damped Spring Volatility Model Outlook

Global realized volatility continues to fall. Long volatility positioning has been largely eliminated at losses and there is currently no sign of offside short volatility positioning.

Our forecast for future realized equity volatility remains low and as we will discuss below the framework which drives our expectations remains extremely benign



We do not expect our estimate to fall below the 2017 historic lows, but further low realized volatility drops are predicted.

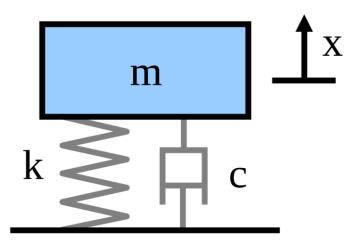
Let's look at the framework

The Damped Spring Framework has four basic principles:

- Changes in expectations drive market prices
- Market prices can overshoot and undershoot "fair value"
- Positioning and Investor conditions can impact flow which can lead to mispricing
- The Damped Spring Model is useful in understanding market, market participant and market dampening participant conditions

The inputs for analysis are taken from a wide range of data sources and systemized where possible.

The Damped Spring Model describes markets as a physical system.



Where

- m is the market
- x is a market moving influence
- k is the springiness of the market and its ability to incorporate the market moving influence
- c is the damper of various participants and market structure elements which counteract volatility created by market moving influence and market participants seeking new price equilibrium

What about today?

Market moving influences (x)

- Earnings are just beginning in the US.
- Central Banks will be making major announcements in the next few weeks

Markets Ability to absorb shocks (k)

- Investor performance has been strong which is consistent with drawdowns that are shallow.
- Banks and Broker/Dealers who provide leverage to investors and mediumterm liquidity, when necessary, are in good shape in the US and ok shape around the globe.
- Portfolios having derisked in 2018 have some capacity to add risk.
- A negative is that Government deficit expectations are growing, and the paper will need a home.
- However, QT will stop by September and that provides some offset and new QE is likely by year end
- Corporations continue to buy shares and will return to market as earnings are announced

Move countering forces and mechanisms (c)

- Trump is wielding the Tariff Axe as a market stabilizer. When the markets
 are up, he "plays with the houses money" when they are down, he can ease
 trade tension by appearing to make progress
- The Big Deal for the future of volatility will come when the central banks are tested. The ECB and BOJ will fail a declining growth test for sure as they are out of ammunition. The US has shifted radically to more accommodation and it will be a test of the willingness to implement further shifts if the economy weakens given the likely extreme pressure that Trump exerts. The US will also face a real test of Fed independence if growth holds or improves and inflation becomes a real threat. My expectation is they will fail that test miserably. But today the lack of central bank guardrails can be largely ignored. Immediately the central banks easing's will be perceived as "enough"
- US banks/Broker Dealers are shifting toward added risk capital for medium term liquidity which should provide a meaningful counterweight to market moves
- Non-Traditional market makers continue to enter the field and are volatility killers.

Adding it all up

Over the next few weeks news impact risk is meaningful in the short term but not much past July. Selling vol into uncertainty when the medium term looks benign is a reasonable approach. Strong performance by traditional market participants and healthy medium-term liquidity providers is usually enough to keep realized volatility quite low. Volatility would likely to go even lower if central banks were willing and **able** to adjust policy. Trump is oddly stabilizing. For the next quarter we think the environment will benign.

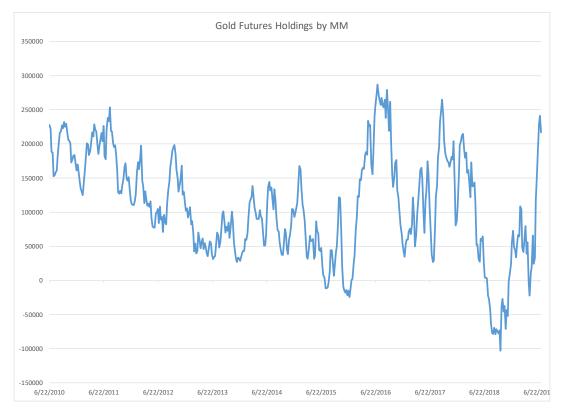
Flow and positioning

Major participants in the global markets are largely neutral as a group and positioning is not offsides enough to cause an exaggerated move relative to the shifts in news. Its worth noting a couple of short-term crowded situations.

Gold

We at Damped Spring Have been bullish gold for 120 pts and remain max bullish. However, it has become a popular trade. Given our expectation of significant but not ultimately successful easing by global central banks it is our view that gold has \$50 or so to move on the upside over the next few weeks. We are concerned about

the "crowd" but will monitor flow, news and price action during the weeks to come. It has not gone unnoticed by us that Crypto has topped.



Equity

Equity markets particularly in the US continue to be driven by the same flow fundamentals in place for years. Since the financial crisis unlevered investors have been selling equities and using the proceeds in the real economy for consumption and real asset investment. This is the critically important final step of QE. The buyer of the equities sold by investors has been US corporations via share buyback. Even since the tax advantage of borrowing money and using it to repurchase stocks was reduced significantly in 2017 the corporate habit is intact. A failure to see attractive investments in capacity for production in the US has also driven corporates to their own stock. This is the critical transfer mechanism for QE in the US. In Europe, this mechanism doesn't exist. In Japan, the BOJ simply ignored this mechanism and went right to the stock market directly. Some time in the coming downturn Europe first and ultimately the US may have to follow Japan.

Bonds

Sometime in the next few months the US will begin reinvesting proceeds and soon after Europe and the US will begin a cycle of QE. This is a bullish development for bonds and all financial assets as it will support initially asset prices relative to cash. However, meaningful risk premium contraction is unlikely given the broken transfer mechanism in Europe and Japan which will make their stimulus efforts ineffective

leaving the US to pressure down global term premiums. For the immediate future term premium contraction and continued weakening growth will fuel a moderate bond market rally. Once the easing proves ineffective a second bond market rally will occur driven by more rapidly falling growth and deflation expectations as term premiums expansion is a mild counteracting force at that point. Equities will struggle. This is likely to occur sometime in the fall.

As for short term flow. Hedge funds remain very short longer-term bonds, US banks continue to buy bonds in lieu of making loans

